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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
19304DT GSRS, MISSILE NUMBER 1066, ROUND NUMBER V-56, 23 JULY 1--ETC(U)
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METEOROLOGICAL DATA REPORT

19304DT GSRS
Missile No. 1066
Round No. V-56
23 July 1979

by

White Sands Meteorological Team

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WHITE SANDS MISSILE RANGE, NEW MEXICO

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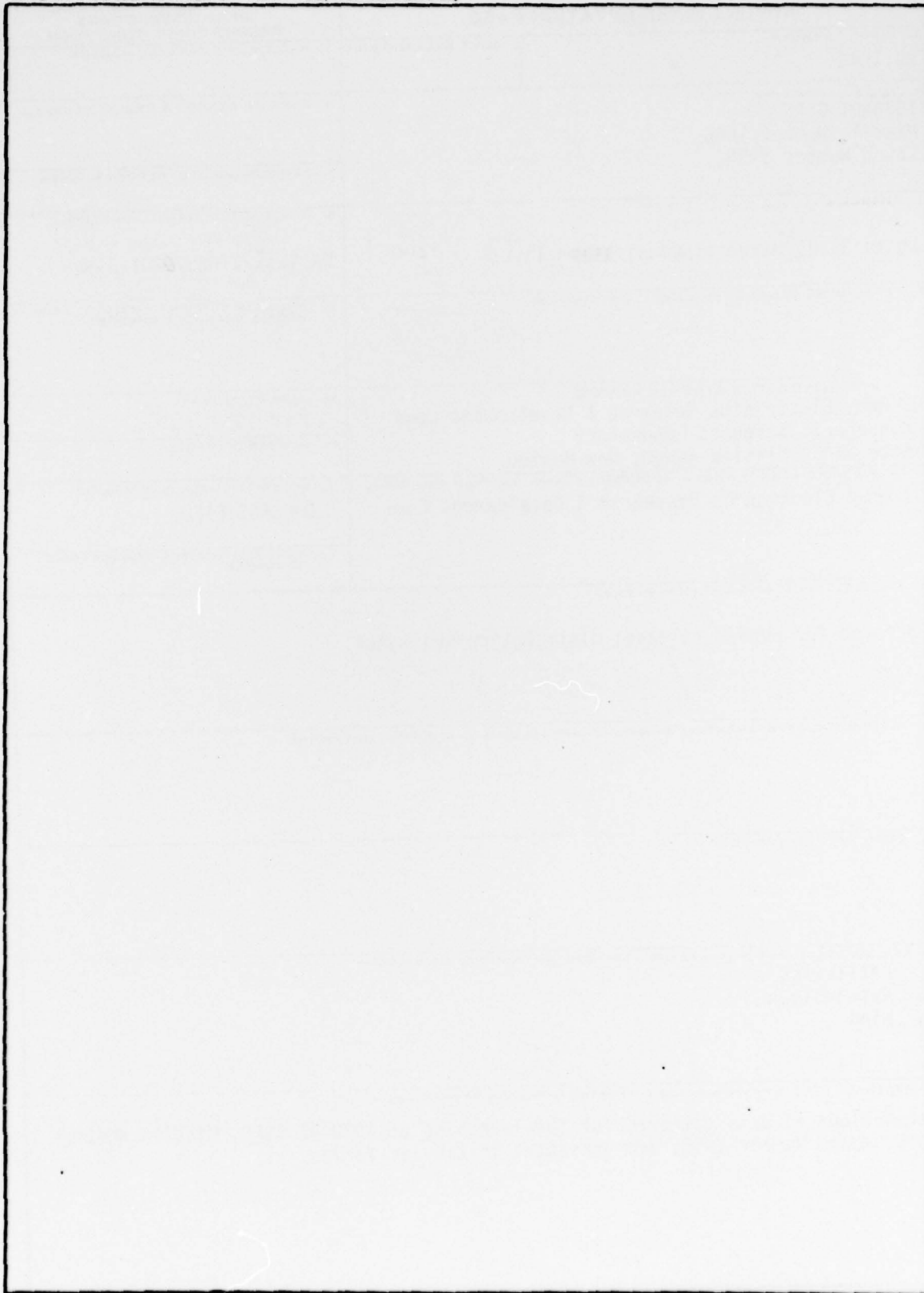
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19304DT GSRS, Missile Number 1066, Round Number V-56, are presented in tabular form.		

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)



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INTRODUCTION

19304DT GSRS . Missile Number 1066, Round Number V-56 , was launched from LC-33 . White Sands Missile Range (WSMR), New Mexico, at 1400 MDT, 23 July 1979 . The scheduled launch time was 1400 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

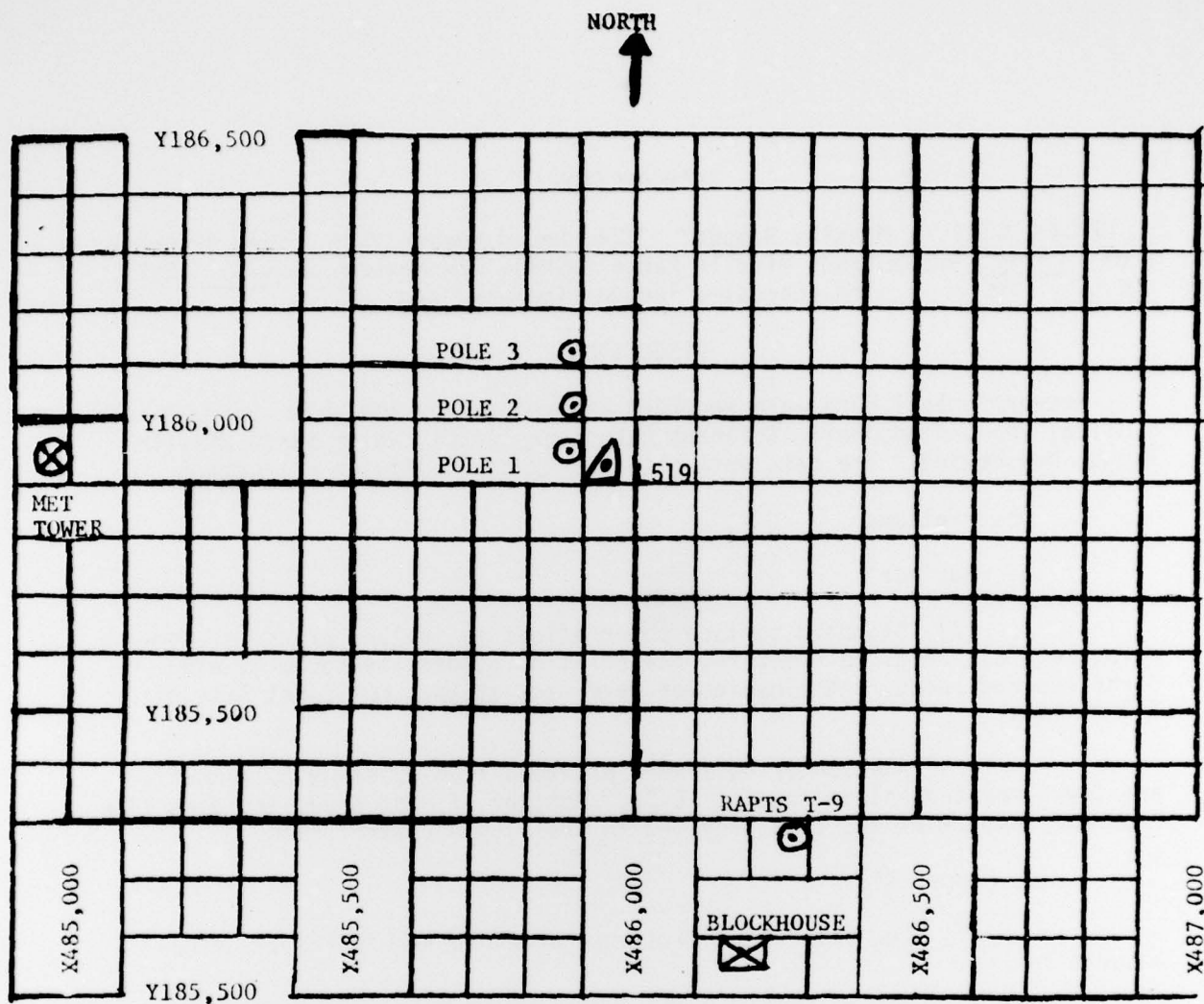
SITE AND ALTITUDE

No Available

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 90,500 feet in 500-foot increments.

SITE AND TIME

SMR 1300 MST



1. MET TOWER - 4 Bendix Model T-20 Anemometers at 12 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
 - (a) Pole #1 - 38.7 ft
 - (b) Pole #2 - 53.0 ft
 - (c) Pole #3 - 83.6 ft
3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

TABLE 1. Surface observations taken at LC-33
 23 July 1979 at 1400 MDT, 19304DT GSRS,
 Missile No. 1066, Round No. V-56.

ELEVATION	3977.30	FT/MSL
PRESSURE	876.0	MBS
TEMPERATURE	35.0	°C
RELATIVE HUMIDITY	29	%
DEW POINT	14.2	°C
DENSITY	983	GM/M ³
WIND SPEED	03	MPH
WIND DIRECTION	090	DEGREES
CLOUD COVER	2 CB	1 CS

TABLE 2. LC-33 FIXED POLE ANEMOMETER-MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	220	05.0	-30	235	03.0	-30	247	07.0
-20	237	05.0	-20	251	04.0	-20	230	05.0
-10	221	04.0	-10	263	03.0	-10	228	03.0
0.0	231	05.5	0.0	269	04.5	0.0	235	06.5
+10	229	06.5	+10	251	04.5	+10	246	03.5

Type 19304DT GSRS , Missile No. 1066 , Round No. Y-56 launched
from LC-33 on 23 July 1979 at 1400 MDT .

POLE #1 = X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL

POLE #3 = X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL

NOTE: Wind directions are referenced to the firing azimuth _____
or true north true north .

TABLE 3. LC-33 METEOROLOGICAL TOWER ANEMOMETER-MEASURED WINDS (202 FT. TOWER)

LEVEL #1 12 ft.			LEVEL #2 62 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	240	10.5	-30	243	13.0
-20	258	10.5	-20	235	11.5
-10	243	08.0	-10	238	12.0
0.0	264	10.0	0.0	243	10.0
+10	255	09.5	+10	232	09.0
LEVEL #3 102 ft.			LEVEL #4 202 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	260	12.0	-30	287	07.0
-20	252	12.0	-20	293	07.0
-10	242	12.0	-10	270	07.5
0.0	265	10.0	0.0	271	07.0
+10	250	08.0	+10	250	06.0

WTSM Coordinates: X484,982.64 Y185,957.73 H3983.00 (base)

Type 19304DT GSRS, Missile No. 1066, Round No. V-56 launched
from LC-33 on 23 July 1979 at 1400 MDT.

NOTE: Wind directions are referenced to the firing azimuth _____
or true north true north.

STATION ALTITUDE 3997.30 FEET MSL
28 JULY 79
ASCENSION NO. 252

SIGNIFICANT LEVEL DATA

204000Z JUL 79
S M R

GEOMETRIC COORDINATES
106.42307 LAT DEG
106.42307 LONG DEG

PRESSURE	GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	
875.5	3997.3	34.7	15.1	31.0
866.0	4721.4	33.0	7.0	21.0
850.0	4671.6	31.3	7.7	23.0
758.4	8051.9	21.9	6.2	35.0
709.0	10433.9	15.1	-8.3	19.0
619.8	13767.0	6.2	-3	63.0
593.2	14243.5	2.7	-1.0	73.0
575.4	13755.3	2.6	-2.7	68.0
549.0	16999.1	-5	-6.3	65.0
524.6	13189.6	-3.4	-7.5	73.0
516.6	13509.3	-4.0	-11.7	55.0
500.0	14437.7	-3.8	-15.0	38.0
478.0	20601.8	-5.9	-25.2	20.0
400.0	25108.4	-15.7	-24.4	47.0
368.0	27161.5	-20.0	-28.4	47.0
349.4	28422.9	-22.0	-36.2	25.0
337.6	29252.7	-23.4	-40.5	19.0
309.0	31365.7	-27.9	-38.0	35.0
300.0	32061.5	-30.4	-40.3	37.0
250.0	36233.1	-41.0	-50.0	34.0
200.0	41100.9	-53.5		
173.6	44059.6	-60.1		
154.6	46415.9	-65.2		
130.0	47018.5	-67.2		
132.8	49408.2	-73.0		
115.6	52083.7	-74.0		
109.2	53165.9	-71.8		
100.0	54299.4	-71.6		
86.4	57750.3	-71.2		
77.2	59933.0	-64.0		
70.0	61972.5	-63.1		
50.6	66290.3	-63.1		
50.0	68311.5	-59.6		
34.0	76011.8	-53.9		
30.0	79601.0	-48.8		
23.0	85383.0	-48.4		
20.0	88454.7	-44.5		
18.2	90544.1	-44.9		

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

UPPER AIR DATA
2040000252
S M R

STATION ALTITUDE 3997.30 FEET MSL
23 JULY 79 1300 HRS MST
ASCENSION NO. 252

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (T.O.)	SPEED KNOTS	INDEX OF REFRACTION
3997.3	875.5	34.7	15.1	983.4	960.1	90.0	4.1	1.000288
4000.0	875.4	34.7	15.0	983.4	960.1	90.0	4.1	1.000288
4500.0	850.8	32.4	17.8	976.7	962.0	92.9	2.9	1.000261
5000.0	840.2	30.9	23.5	964.9	961.0	95.9	1.8	1.000258
5500.0	831.8	29.5	25.4	952.7	959.4	147.7	1.0	1.000256
6000.0	817.5	28.2	27.3	940.0	977.9	344.4	.5	1.000253
6500.0	803.5	26.8	29.3	926.0	970.3	19.5	1.3	1.000250
7000.0	789.0	25.4	31.2	917.2	974.0	10.8	3.0	1.000247
7500.0	770.3	24.0	33.1	905.7	973.2	10.5	3.1	1.000244
8000.0	753.0	22.0	35.0	894.5	971.6	11.0	2.8	1.000241
8500.0	749.5	21.1	34.1	883.7	969.7	11.9	2.0	1.000234
9000.0	730.6	19.6	30.2	873.5	967.7	343.2	1.4	1.000225
9500.0	720.6	18.0	26.3	863.3	965.7	290.7	1.2	1.000217
10000.0	710.9	16.5	22.4	853.2	963.7	201.1	1.8	1.000209
10500.0	698.3	14.9	19.9	842.9	961.0	201.5	2.7	1.000203
11000.0	685.7	13.6	26.5	831.2	960.4	205.4	3.8	1.000204
11500.0	673.3	12.3	33.1	819.0	959.0	271.1	3.6	1.000205
12000.0	661.1	10.9	39.7	808.3	957.0	279.7	3.1	1.000204
12500.0	649.1	9.6	46.3	797.5	950.1	273.5	2.4	1.000204
13000.0	637.4	8.2	52.9	789.4	944.0	202.7	2.0	1.000203
13500.0	625.9	6.9	59.5	775.7	933.1	250.3	2.6	1.000201
14000.0	614.4	5.5	65.0	765.4	921.5	250.9	3.5	1.000199
14500.0	603.1	4.0	69.2	755.3	949.7	201.1	4.9	1.000196
15000.0	591.9	2.7	72.7	745.0	948.1	201.9	6.5	1.000193
15500.0	580.9	2.6	74.4	731.4	948.0	202.9	7.8	1.000189
16000.0	570.1	2.0	77.4	719.0	947.2	209.0	7.9	1.000184
16500.0	559.4	.7	80.2	709.5	945.7	277.3	7.8	1.000180
17000.0	549.0	-1.5	83.3	699.0	944.1	292.4	7.8	1.000175
17500.0	538.6	-2.9	86.4	689.5	942.7	100.9	7.6	1.000173
18000.0	528.4	-4.3	91.7	679.5	941.2	323.0	6.7	1.000170
18500.0	518.4	-5.9	99.0	669.5	939.9	340.5	5.4	1.000163
19000.0	508.5	-7.3	107.8	659.9	939.8	1.9	3.7	1.000158
19500.0	499.8	-8.9	116.4	644.0	939.0	20.3	2.1	1.000152
20000.0	493.2	-10.3	125.3	634.0	938.3	92.2	1.4	1.000148
20500.0	479.9	-11.7	134.7	624.7	937.3	179.4	1.3	1.000144
21000.0	470.5	-13.1	144.2	614.9	936.1	170.9	1.7	1.000141
21500.0	461.3	-14.5	154.2	605.3	934.0	223.1	1.8	1.000139
22000.0	452.5	-15.9	164.2	595.9	933.0	237.9	2.5	1.000138
22500.0	443.4	-17.3	174.2	587.0	932.2	243.0	2.8	1.000136
23000.0	434.8	-18.7	184.2	577.0	930.9	209.0	3.6	1.000134

GEODETIC COORDINATES
32.46034 LAT DEG
106.42307 LONG DEG

UPPER AIR DATA
204000Z252
5 M R

STATION ALTITUDE 3997.30 FEET MSL
23 JULY 79
ASCENSION NO. 252

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS/CUBIC METER	SPEED OF SOUND M/SEC	DIRECTION DEGREES (T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	420.3	-12.2	-23.6	37.4	563.5	629.0	199.5	4.8	1.000132
24000.0	417.9	-13.3	-23.9	40.4	559.0	620.3	202.5	5.4	1.000130
24500.0	409.7	-14.4	-24.1	43.4	551.2	620.9	203.2	5.9	1.000128
25000.0	401.7	-15.5	-24.3	46.4	542.0	620.0	209.3	6.4	1.000126
25500.0	393.7	-16.5	-25.1	47.0	534.0	624.0	209.0	7.0	1.000123
26000.0	385.8	-17.6	-26.1	47.0	525.4	623.0	204.1	7.3	1.000121
26500.0	378.0	-18.6	-27.1	47.0	517.0	621.7	199.0	7.7	1.000119
27000.0	370.4	-19.7	-28.1	47.0	508.0	620.5	197.0	8.2	1.000117
27500.0	362.9	-20.5	-30.2	41.4	500.2	619.3	190.0	8.7	1.000114
28000.0	355.5	-21.3	-33.2	33.0	481.0	618.3	194.7	9.3	1.000112
28500.0	348.3	-22.1	-36.0	25.3	463.2	617.3	193.1	9.9	1.000109
29000.0	341.2	-23.0	-39.1	21.1	447.9	616.3	191.5	10.4	1.000107
29500.0	334.1	-23.9	-40.0	20.9	436.9	615.1	188.8	10.9	1.000105
30000.0	327.2	-25.0	-39.3	24.7	459.2	613.0	185.5	11.3	1.000103
30500.0	320.4	-26.1	-38.9	23.4	451.0	612.5	181.4	11.7	1.000102
31000.0	313.8	-27.1	-38.7	32.2	444.2	611.1	170.5	12.2	1.000100
31500.0	307.2	-28.4	-38.9	35.4	437.2	609.6	172.9	12.6	1.000099
32000.0	300.8	-30.2	-40.1	36.8	421.2	607.3	170.0	12.5	1.000097
32500.0	294.3	-31.5	-41.4	33.7	424.2	605.0	171.1	12.0	1.000096
33000.0	288.0	-32.8	-42.6	36.3	417.0	604.0	176.7	10.9	1.000094
33500.0	281.7	-34.1	-43.9	35.0	410.4	602.4	163.4	10.0	1.000092
34000.0	275.7	-35.3	-45.1	35.6	403.7	600.8	191.1	9.4	1.000091
34500.0	269.7	-36.6	-46.3	35.2	397.1	599.2	197.2	9.0	1.000089
35000.0	263.9	-37.9	-47.6	34.9	390.7	597.8	199.4	8.4	1.000088
35500.0	258.2	-39.1	-48.8	34.5	384.0	596.0	201.9	8.0	1.000086
36000.0	252.6	-40.4	-50.1	34.2	373.1	594.4	204.0	8.0	1.000085
36500.0	247.0	-41.7	-51.7	32.2**	371.7	592.7	205.8	8.1	1.000083
37000.0	241.4	-43.0	-53.8	28.7**	365.3	591.1	207.7	8.5	1.000082
37500.0	235.9	-44.2	-56.0	25.2**	359.1	589.4	208.3	9.0	1.000080
38000.0	230.0	-45.5	-58.3	21.7**	352.9	587.0	208.5	10.1	1.000079
38500.0	223.4	-46.8	-60.6	18.2**	340.9	580.1	208.7	11.2	1.000077
39000.0	220.3	-48.1	-63.5	14.7**	340.9	584.4	211.0	12.2	1.000076
39500.0	215.3	-49.4	-66.5	11.2**	335.1	582.0	212.9	13.1	1.000075
40000.0	210.4	-50.7	-70.2	7.7**	329.4	581.1	213.1	13.9	1.000073
40500.0	205.6	-52.0	-75.2	4.2**	323.0	579.4	213.2	14.7	1.000072
41000.0	200.9	-53.2	-81.0	.7**	318.5	577.7	212.1	14.8	1.000071
41500.0	196.2	-54.4			312.5	570.2	210.9	14.8	1.000070
42000.0	191.6	-55.5			300.7	574.7	214.3	14.3	1.000068
42500.0	187.1	-56.6			288.9	573.3	219.4	13.7	1.000067
43000.0	182.6	-57.7			285.4	571.0	220.0	13.6	1.000066

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3997.30 FEET MSL
 23 JULY 79 1300 HRS MST
 ASCENSION NO. 252

UPPER AIR DATA
 204000Z
 5 M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND METERS PER SECOND	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
43500.0	170.3	-59.9		289.9	570.3	227.0	1.000055
44000.0	174.1	-60.0		284.5	568.0	220.1	1.000059
44500.0	159.9	-61.1		279.0	567.4	220.0	1.000062
45000.0	165.8	-62.1		273.0	565.9	212.4	1.000061
45500.0	161.7	-63.2		268.4	564.5	204.9	1.000060
46000.0	157.8	-64.3		263.0	563.0	195.0	1.000059
46500.0	153.9	-65.5		258.2	561.4	195.9	1.000058
47000.0	150.1	-67.1		253.9	559.2	200.7	1.000057
47500.0	146.4	-68.4		249.0	557.5	203.0	1.000055
48000.0	142.7	-69.6		244.2	555.8	203.2	1.000054
48500.0	139.1	-70.8		239.5	554.2	212.0	1.000053
49000.0	135.6	-72.0		234.8	552.5	224.8	1.000052
49500.0	132.2	-73.0		230.1	551.1	237.5	1.000051
50000.0	128.8	-73.2		224.4	550.9	237.0	1.000050
50500.0	125.5	-73.4		218.7	550.6	227.0	1.000049
51000.0	122.3	-73.6		213.0	550.3	215.9	1.000048
51500.0	119.2	-73.8		208.2	550.1	195.1	1.000045
52000.0	116.1	-74.0		203.1	549.3	173.9	1.000045
52500.0	113.1	-73.2		197.1	550.9	177.9	1.000044
53000.0	110.3	-72.2		191.1	552.3	177.9	1.000043
53500.0	107.3	-71.8		185.9	552.9	171.0	1.000041
54000.0	104.7	-71.7		181.1	552.9	161.9	1.000040
54500.0	102.1	-71.6		176.0	553.0	148.4	1.000039
55000.0	99.5	-71.5		171.9	553.1	125.1	1.000037
55500.0	97.0	-71.5		167.5	553.4	100.1	1.000036
56000.0	94.5	-71.4		163.2	553.5	94.9	1.000035
56500.0	92.1	-71.4		159.0	553.4	63.0	1.000035
57000.0	89.9	-71.3		155.0	553.5	65.8	1.000034
57500.0	87.5	-71.2		151.0	553.6	93.3	1.000034
58000.0	85.3	-70.4		146.0	554.7	103.4	1.000033
58500.0	83.2	-68.3		141.0	555.9	110.7	1.000032
59000.0	81.1	-67.2		137.2	559.1	116.5	1.000031
59500.0	79.1	-65.5		132.8	561.3	120.5	1.000030
60000.0	77.2	-64.0		128.0	563.7	130.5	1.000029
60500.0	75.3	-63.0		123.1	566.0	130.5	1.000028
61000.0	73.4	-61.5		118.0	567.9	130.5	1.000027
61500.0	71.7	-60.3		113.0	569.3	113.0	1.000026
62000.0	69.9	-59.1		108.0	570.0	104.0	1.000025
62500.0	68.2	-58.1		103.1	570.0	93.7	1.000025
63000.0	66.5	-57.1		98.4	570.0	90.0	1.000025

STATION ALTITUDE 3997.30 FEET MSL
23 JULY 79
ASCENSION NO. 292

UPPER AIR DATA
2040000005L
5 M M

GEOMETRIC COORDINATES
32.44034 LAT DEG
106.42307 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (T) KNOTS	INDEX OF REFRACTION
03500.0	04.9	-63.1		107.7	564.0	62.0	1.000024
04000.0	03.4	-63.1		105.1	564.0	62.2	1.000023
04500.0	01.8	-63.1		102.5	564.0	92.0	1.000023
05000.0	00.3	-63.1		100.0	564.0	98.7	1.000022
05500.0	00.8	-63.1		97.9	564.0	93.9	1.000022
06000.0	07.4	-63.1		95.2	564.0	93.0	1.000021
06500.0	53.0	-62.0		92.0	565.0	92.2	1.000021
07000.0	34.7	-62.1		90.3	565.9	91.9	1.000020
07500.0	53.4	-61.4		87.8	566.9	91.5	1.000019
08000.0	52.1	-60.7		85.4	567.0	90.3	1.000019
08500.0	50.8	-60.1		83.1	568.7	93.5	1.000018
09000.0	44.0	-59.5		80.9	569.5	97.3	1.000018
09500.0	46.4	-59.1		78.0	569.9	93.8	1.000017
10000.0	47.3	-58.8		75.0	570.4	94.5	1.000017
10500.0	40.2	-58.4		74.9	570.9	93.3	1.000017
11000.0	45.1	-58.1		73.0	571.3	92.0	1.000016
11500.0	44.0	-57.7		71.2	571.3	91.0	1.000016
12000.0	43.0	-57.4		69.4	572.3	91.0	1.000015
12500.0	42.0	-57.0		67.0	572.7	92.5	1.000015
13000.0	41.0	-56.7		65.9	573.2	93.2	1.000015
13500.0	40.0	-56.3		64.3	573.7	92.9	1.000014
14000.0	39.1	-56.0		62.7	574.1	91.5	1.000014
14500.0	38.1	-55.6		61.1	574.0	90.1	1.000014
15000.0	37.2	-55.2		59.5	575.1	67.3	1.000013
15500.0	36.4	-54.9		58.1	575.5	63.9	1.000013
16000.0	35.5	-54.5		56.0	575.0	60.4	1.000013
16500.0	34.7	-54.2		55.2	575.5	91.2	1.000012
17000.0	33.9	-53.7		53.0	577.1	94.0	1.000012
17500.0	33.1	-52.0		52.5	578.3	97.0	1.000012
18000.0	32.3	-51.8		50.9	579.0	92.0	1.000011
18500.0	31.0	-50.9		49.5	580.0	100.1	1.000011
19000.0	30.9	-49.9		48.1	582.0	100.9	1.000011
19500.0	30.1	-49.0		46.0	583.3	93.0	1.000010
20000.0	29.5	-48.8		45.7	583.0	93.0	1.000010
20500.0	28.3	-48.7		44.7	583.0	92.7	1.000010
21000.0	27.1	-48.7		43.7	583.0	93.4	1.000010
21500.0	27.5	-48.7		42.7	583.7	94.1	1.000009
22000.0	26.9	-48.6		41.7	583.7	94.9	1.000009
22500.0	26.3	-48.0		40.7	583.3	90.1	1.000009
23000.0	25.7	-48.6		39.0	583.0	97.3	1.000009

STATION ALTITUDE 3497.30 FEET MSL 23 JULY 79 ASCENSION NO. 252			UPPER AIR DATA 2040000Z S M R			GEOGETIC COORDINATES 32.48034 LAT DEG 106.42307 LONG DEG		
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION DEGREES(T)	SPEED KNOTS	INDEX OF REFRACTION
03500.0	25.1	-48.5		38.9	565.9	98.1	34.8	1.000009
04000.0	24.5	-48.5		38.0	563.9	97.8	36.4	1.000008
04500.0	24.0	-48.5		37.1	564.0	97.6	38.0	1.000008
05000.0	23.4	-48.4		36.3	564.0	97.6	36.7	1.000008
05500.0	22.9	-48.3		35.4	564.2	98.1	38.1	1.000008
06000.0	22.4	-47.6		34.9	565.1	93.6	37.5	1.000008
06500.0	21.9	-47.0		33.7	565.9	98.2	37.2	1.000007
07000.0	21.4	-46.3		32.8	566.7	95.7	37.6	1.000007
07500.0	20.9	-45.7		32.0	567.5	95.2	38.0	1.000007
08000.0	20.4	-45.1		31.2	568.3			1.000007
08500.0	20.0	-44.5		30.4	569.1			1.000007
09000.0	19.5	-44.5		29.7	569.0			1.000007
09500.0	19.1	-44.7		29.1	568.8			1.000006
10000.0	18.7	-44.8		28.5	568.7			1.000006
10500.0	18.2	-44.9		27.8	568.6			1.000006

STATION ALTITUDE 3997.30 FEET MSL
23 JULY 79
ASCENSION NO. 202

MRN SIGNIFICANT LEVEL DATA
2040000202
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LONG DEG

GEOPOTENTIAL ALTITUDE DECIMETERS	DIRECTION DEG (TN)	WIND DATA		E-W MPS	U-W PT DE DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS			AIR DEG C		
2747.	9999.**	9999.**	-9999.**	-9999.**	99	-44.9		1.820+1
2083.	9999.**	9999.**	-9999.**	-9999.**	99	-44.5		2.000+1
2591.	96.	20.	3.	-19.	99	-46.4		2.300+1
2416.	97.	18.	2.	-18.	99	-46.8		3.000+1
2535.	94.	18.	1.	-18.	99	-53.9		3.400+1
2090.	97.	13.	2.	-13.	99	-54.6		5.000+1
2013.	92.	9.	0.	-9.	99	-63.1		5.000+1
1862.	104.	5.	1.	-5.	99	-63.1		7.000+1
1622.	151.	9.	5.	-7.	99	-64.0		7.720+1
1755.	99.	9.	1.	-9.	99	-71.2		8.440+1
1666.	128.	5.	3.	-4.	99	-71.6		1.000+2

** WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 9997.30 FEET MSL
23 JULY 79 1300 HRS MST
ASCENSION NO. 252

MANDATORY LEVELS
2000000252
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	4868.	31.3	7.7	25.	74.6	2.1	
800.0	6636.	26.4	7.3	30.	22.9	1.6	
750.0	8486.	21.2	4.7	34.	2.2	2.0	
700.0	10424.	15.1	-3.3	19.	260.7	2.6	
650.0	12452.	9.7	-1.4	40.	274.1	2.4	
600.0	14622.	3.6	-1.5	70.	261.7	3.3	
550.0	16929.	-4	-6.1	85.	290.7	7.8	
500.0	19410.	-3.8	-19.0	36.	21.8	2.4	
450.0	22113.	-9.2	-23.9	29.	233.7	2.6	
400.0	25060.	-15.7	-24.4	47.	209.4	9.5	
350.0	28329.	-21.9	-35.9	27.	193.6	9.7	
300.0	31997.	-30.4	-40.3	37.	170.3	12.5	
250.0	36158.	-41.0	-50.6	34.	205.8	8.0	
200.0	41002.	-53.5			211.9	14.8	
175.0	43781.	-59.7			229.6	14.0	
150.0	46891.	-67.2			200.0	9.8	
125.0	50430.	-73.4			226.8	10.7	
100.0	54728.	-71.6			129.7	9.5	
80.0	59074.	-66.3			122.4	16.6	
70.0	61759.	-63.1			104.8	10.3	
60.0	64870.	-63.1			96.3	13.8	
50.0	68571.	-59.6			96.7	23.0	
40.0	73186.	-56.3			93.0	32.6	
30.0	79259.	-48.8			97.6	35.8	
25.0	83192.	-48.5			96.1	34.9	
20.0	88038.	-44.5					

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3997.30 FEET MSL
23 JULY 79
ASCENSION NO. 452

MPN MANDATORY LEVELS
2040060202
5 M R

GEODETTIC COORDINATES
32.40034 LAT DEG
106.42307 LON DEG

GEOCENTRAL ALTITUDE DECA METERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA		DOW PT DE DEG C	TEMPERATURE		PRESSURE MILLIBARS
			N-S MPS	E-W MPS		AIR DEG C		
2063.	999.**	9999.**	-9999.**	-9999.**	99	-44.5		2.000+1
2060.	98.	18.	3.	-10.	99	-48.5		2.500+1
2410.	98.	18.	2.	-10.	99	-48.8		3.000+1
2451.	93.	17.	1.	-17.	99	-56.3		4.000+1
2090.	97.	13.	1.	-10.	99	-59.6		5.000+1
1977.	98.	7.	1.	-7.	99	-63.1		6.000+1
1082.	105.	5.	1.	-5.	99	-63.1		7.000+1
1501.	122.	10.	5.	-0.	99	-66.3		8.000+1
1000.	130.	5.	2.	-0.	99	-71.6		1.000+2
1537.	227.	5.	4.	4.	99	-73.4		1.250+2
1429.	201.	5.	5.	2.	99	-67.2		1.500+2
1334.	230.	7.	5.	0.	99	-59.7		1.750+2
1450.	212.	6.	6.	4.	99	-53.5		2.000+2
1102.	206.	4.	4.	2.	10	-41.0		2.500+2
975.	170.	6.	6.	-1.	10	-30.4		3.000+2
663.	194.	5.	5.	1.	14	-21.9		3.500+2
764.	209.	3.	3.	2.	09	-15.7		4.000+2
674.	234.	1.	1.	1.	10	-9.2		4.500+2
592.	22.	1.	-1.	-0.	12	-3.8		5.000+2
510.	291.	4.	-1.	4.	00	-0.4		5.500+2
440.	262.	3.	0.	3.	00	3.6		6.000+2
500.	274.	1.	-0.	1.	11	9.7		6.500+2
518.	261.	1.	0.	1.	23	15.1		7.000+2
459.	2.	1.	-1.	-0.	10	21.2		7.500+2
202.	23.	1.	-1.	-0.	19	20.4		8.000+2
140.	73.	1.	-0.	-1.	24	31.3		8.500+2

** WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.